UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

Section 21.3 of Title 10 of the *Code of Federal Regulations* Part 21 (10 CFR 21.3), provides the definition of basic component as it relates to the reporting of defects and nonconformances. By letter dated July 13, 1999, as supplemented, October 14 and 22, 1999, January 26, and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, (hereinafter, the submittal) the licensee requested an exemption from the definition of basic component to exclude safety-related structures, systems, or components (SSCs) classified in accordance with

its risk-informed categorization process as low safety significant (LSS) or non-risk significant (NRS) from the scope of the definition of basic component. STPNOC proposed that it would not apply procurement, dedication, and reporting requirements in 10 CFR Part 21 to safety-related LSS and NRS SSCs. STPNOC stated that 10 CFR Part 21 imposes procurement and dedication requirements and requires the reporting of defects and noncompliances involving basic components whose failure could cause a substantial safety hazard. Also, STPNOC stated that reporting of defects and noncompliance involving safety-related LSS and NRS SSCs is not necessary to meet the purpose of 10 CFR Part 21 because failure of such SSCs would not result in a substantial safety hazard.

3.0 <u>DISCUSSION</u>

The Commission, pursuant to 10 CFR 21.7, may grant exemptions from the requirements of 10 CFR Part 21 as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest.

The U.S. Nuclear Regulatory Commission (NRC) has completed its evaluation of STPNOC's request for an exemption from the definition of basic component in 10 CFR 21.3. As it relates to nuclear power plants licensed pursuant to 10 CFR Part 50, a basic component is defined as a SSC, or part thereof, that affects its safety function necessary to assure (1) the integrity of the reactor coolant pressure boundary; (2) the capability to shut down the reactor and maintain it in a safe shutdown condition; or (3) the capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1) or 10 CFR 100.11. Further, a basic component is defined as an item designed and manufactured under a quality assurance program complying with 10 CFR Part 50, Appendix B, or commercial-grade items which have successfully

completed the dedication process. Finally, the definition of basic component includes the safety-related design, analysis, inspection, testing, fabrication, replacement of parts, or consulting services that are associated with the SSC hardware.

In the discussion of the purpose in 10 CFR 21.1, the need to identify the failure of SSCs to satisfy requirements (e.g., NRC regulations or Atomic Energy Act), or identify SSCs that contain defects, is related to conditions that could result in a substantial safety hazard. A substantial safety hazard is defined in 10 CFR 21.3 as meaning a loss of safety function to the extent that there is a major reduction in the degree of protection provided to public health and safety.

In the safety evaluation (SE), dated [to be determined], prepared in support of this exemption, the NRC describes its assessment of the attributes of the proposed treatment processes for LSS and NRS SSCs. The NRC determined that the proposed treatment processes, if effectively implemented by the licensee, can result in safety-related LSS and NRS SSCs remaining capable of performing their safety functions under design-basis conditions. Also, as discussed in the SE, the NRC determined that the licensee's categorization process provides a reasonable method for determining that safety-related LSS and NRS SSCs have a small contribution to overall safety. Further, the sensitivity study conducted by the licensee demonstrates that for relatively large changes in availability of all of the safety-related LSS SSCs modeled in the probabilistic risk assessment, there is only a small change in the overall plant risk. Therefore, the NRC determined that it is acceptable to exclude LSS and NRS SSCs from the scope of the definition of basic component in 10 CFR 21.3 because the NRC concluded that defects in these components would not result in a substantial safety hazard and thus reporting of such defects is not necessary. On this basis, the NRC finds that the proposed exemption will not endanger life or property or the common defense and security.

The NRC also finds the proposed exemption is otherwise in the public interest since it focuses NRC and licensee attention on the most safety and risk significant SSCs. Further, the NRC finds that the proposed exemption is authorized by law. Thus, the NRC finds that the proposed exemption satisfies the criteria given in 10 CFR 21.7 and should be granted.

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 21.7, the exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. Therefore, the Commission hereby grants, subject to the conditions described below, STPNOC the exemption from the definition of basic component in (1)(ii) of 10 CFR 21.3 for SSCs at STP categorized as LSS and NRS. As conditions of this exemption:

- 1. The licensee shall follow the categorization, treatment, and oversight (evaluation and assessment) processes described in its submittal dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, and relied upon by the staff in approving this exemption as discussed in the NRC's SE dated [to be determined]. The licensee has documented these processes in a proposed Final Safety Analysis Report (FSAR) submittal dated May 21, 2001, found acceptable by the staff as the regulatory basis for granting this exemption. The licensee shall incorporate this proposed FSAR submittal into the STP FSAR.
- 2. The licensee shall implement a change control process that incorporates the following requirements:
 - a. Changes to FSAR Section 13.7.2, "Component Categorization Process," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would decrease the effectiveness of the process in identifying high safety significant and medium safety significant components.
 - b. Changes to FSAR Section 13.7.3, "Treatment of Component Categories," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a reduction in the assurance of component functionality.

- c. Changes to FSAR Section 13.7.4, "Continuing Evaluations and Assessments," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a decrease in effectiveness of the evaluations and assessments.
- d. The licensee shall submit a report, as specified in 10 CFR 50.4, of changes made without prior NRC approval pursuant to these provisions. The report shall identify each change and describe the basis for the conclusion that the change does not involve a decrease in effectiveness or assurance as described above. The report shall be submitted within 60 days of the date of the change.
- e. Changes to FSAR Sections 13.7.2, 13.7.3, and 13.7.4 that do not meet the criteria of a through c above shall be submitted to the NRC for prior review and approval.

Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (FR). Accordingly, based upon the environmental assessment, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment.

This exemption is effective upon submittal of a FSAR update pursuant to 10 CFR 50.71(e) incorporating the FSAR Sections described in the conditions above.

Dated at Rockville, Maryland, this day of 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 DENIAL OF EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

Section 50.34(b)(6)(ii) of Title 10 of the *Code of Federal Regulations* Part 50 [10 CFR 50.34(b)(6)(ii)], requires that the Final Safety Analysis Report (FSAR) include information related to how the requirements of 10 CFR Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," will be satisfied. The regulation at 10 CFR 50.54(a)(3) requires licensees to submit changes that reduce commitments in its Quality Assurance Program (QAP) description for NRC review prior to implementation. By

letter dated July 13, 1999, as supplemented, October 14 and 22, 1999, January 26, and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, (hereinafter, the submittal), the licensee requested an exemption from the requirements of 10 CFR 50.34(b)(6)(ii) with respect to the extent that this regulation incorporates provisions from 10 CFR Part 50, Appendix B, except for Criterion III, "Design Control," Criterion XV, "Nonconforming Materials, Parts, or Components," and Criterion XVI, "Corrective Action." The licensee also requested an exemption from the requirements of 10 CFR 50.54(a)(3) to the extent that it would require the licensee to submit an update to its QAP that would result from the changes that would occur from the exemptions granted to the special treatment requirements of 10 CFR Parts 21, 50, and 100. The scope of the exemptions requested was limited to those safety-related structures, systems or components (SSCs) categorized in accordance with STPNOC's risk-informed categorization process as low safety significant (LSS) or non-risk significant (NRS).

3.0 DISCUSSION

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. Special circumstances are present pursuant to 10 CFR 50.12(a)(2)(i) whenever application of the regulation in the particular circumstances conflicts with other rules or requirements of the Commission. Under 10 CFR 50.12(a)(2)(ii), special circumstances are present when application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying

purpose of the rule. Special circumstances are present pursuant to 10 CFR 50.12(a)(2)(iii) when compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated. Special circumstances are present under 10 CFR 50.12(a)(2)(iv) whenever an exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the granting of the exemption. Special circumstances are present under 10 CFR 50.12(a)(2)(v) whenever the exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation. Special circumstances are present under 10 CFR 50.12(a)(2)(vi) whenever there is any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If 10 CFR 50.12(a)(2)(vi) is relied on exclusively for satisfying the special circumstances provision of 10 CFR 50.12(a)(2), the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The NRC has completed its evaluation of STPNOC's request for an exemption from the requirements of 10 CFR 50.34(b)(6)(ii) and 10 CFR 50.54(a)(3). The NRC has determined that exemptions from these requirements are not appropriate as documented in the safety evaluation dated [to be determined], prepared in support of the licensee's exemption requests.

The underlying purpose of the requirements is for the licensee to document how the quality assurance requirements of 10 CFR Part 50, Appendix B, will be satisfied, including changes to the application of these requirements to safety-related SSCs. The application of a risk-informed categorization process or changes to special treatment requirements applied to safety-related SSCs does not affect the underlying purpose of the requirement of 10 CFR 50.34(b)(6)(ii) or

10 CFR 50.54(a)(3) related to the documentation describing the licensee's QAP. Should the licensee be granted exemptions from any of the requirements of 10 CFR Part 50, Appendix B, for LSS and NRS SSCs, the documentation describing its QAP should note that exemptions have been granted for LSS and NRS SSCs from those requirements. Changes to the QAP that supplement any exemptions from the requirements of 10 CFR Part 50, Appendix B should be reviewed and approved pursuant to the requirements of 10 CFR 50.34(a)(3).

Further, the NRC has found that none of the special circumstances described under 10 CFR 50.12(a)(2) that are necessary for the Commission to grant the exemption are satisfied with regard to the specific requirements of 10 CFR 34(b)(6)(ii) or 10 CFR 50.54(a)(3). There are no conflicts with other rules or requirements of the Commission, the underlying purpose of the rule would not be met by granting the exemption, compliance with the rule would not result in undue hardship or excessive costs, granting the exemption would not result in either a benefit to the public health and safety or a decrease in safety, STPNOC is not seeking temporary relief from the regulation, and there are no other material circumstances not previously considered for which it would be in the public interest to grant an exemption.

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), an exemption is not appropriate. Further, the Commission has determined that special circumstances are not present. Therefore, the Commission hereby denies STPNOC the exemptions from the 10 CFR 50.34(b)(6)(ii) requirements that the FSAR include information related to how the requirements of 10 CFR Part 50, Appendix B will be satisfied for STP and from the requirements of 10 CFR 50.54(a)(3) to submit for NRC review and approval changes

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to the QAP that would result from the granting of exemptions from the special treatment requirements of 10 CFR Parts 21, 50, and 100.

Dated at Rockville, Maryland, this

day of

2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

Under Section 50.49(b) of Title 10 to the *Code of Federal Regulations*, Part 50, [10 CFR 50.49(b)] criteria were established that defined the scope of components to be subject to the requirements of 10 CFR 50.49 [the Environmental Qualification (EQ) Rule]. As defined under 10 CFR 50.49(b) the scope of electrical equipment important to safety that must be included under a program for qualifying equipment includes (1) safety-related electric equipment, (2) nonsafety-related electric equipment whose failure under postulated environmental conditions could prevent satisfactory accomplishment of safety functions (a)

through (c) specified below, and (3) certain post-accident monitoring equipment. Under the regulation, safety-related electric equipment is that relied upon to remain functional during and following design-basis events to ensure (a) the integrity of the reactor coolant pressure boundary, (b) the capability to shut down the reactor and maintain it in a safe shutdown condition, or (c) the capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to the guidelines in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11 as applicable. Further, under the regulation, design-basis events are defined as conditions of normal operation, including anticipated operational occurrences, design-basis accidents, external events, and natural phenomena for which the plant must be designed to ensure functions (a) through (c) defined above.

The purpose of the EQ rule, as defined under 10 CFR 50.49(a), is that licensee's shall establish a program for qualifying electric equipment. The EQ rule provides detailed requirements for the documentation requirements and methodology for qualification that licensee's shall implement to meet the purpose of the rule.

By letter dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, (hereinafter, the submittal), the licensee requested an exemption from the requirements of 10 CFR 50.49(b) to exclude structures, systems, or components (SSCs) categorized as low safety significant (LSS) and non-risk significant (NRS), using the licensee's categorization process, from the scope of SSCs subject to the EQ Rule.

3.0 <u>DISCUSSION</u>

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or

safety, and are consistent with the common defense and security; and (2) when special circumstances are present. Under 10 CFR 50.12(a)(2)(vi), special circumstances are present whenever there is any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If the special circumstance of 10 CFR 50.12(a)(2)(vi) is relied on exclusively, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The NRC has completed its evaluation of STPNOC's request for an exemption from the requirements of 10 CFR 50.49(b). The NRC's evaluation is provided in a safety evaluation (SE), dated [to be determined], prepared in support of this exemption.

The staff has reviewed STPNOC's integrated SSC categorization process. The categorization process was found to use both a probabilistic and a deterministic based methodology that appropriately addressed the issues of defense-in-depth, safety margins, and aggregate risk impacts. The staff finds the proposed categorization process to be acceptable to categorize the risk significance of both functions and SSCs for use in reducing the scope of SSCs subject to special treatment. The categorization process provides an acceptable method for defining those SSCs for which exemptions from the special treatment requirements can be granted. In support of its finding on the licensee's categorization process, the staff also found that the alternative treatment practices (for example the five methods for procuring replacement SSCs that include vendor documentation, equivalency evaluation, technical evaluation, technical analysis, and testing) provide the licensee with a framework that, if effectively implemented, can result in safety-related LSS and NRS SSCs remaining capable of performing their safety functions under design-basis environmental conditions.

In its review, the staff concluded that the requirements of 10 CFR 50.49(e) related to (1) temperature and pressure, (2) humidity, (3) chemical effects, (4) radiation, (5) aging, (6) submergence, and (7) synergistic effects represent design requirements that must be addressed in the licensee's alternative treatment processes so that the licensee could determine that the SSCs will remain capable of performing their safety functions under design-basis environmental conditions. Based on these findings, the staff determined that LSS and NRS SSCs could be excluded from the scope of 10 CFR 50.49, except to the extent that design requirements are imposed by 10 CFR 50.49(e)(1) through (7), without undue risk to public health and safety.

The staff also found that granting of this exemption is in the public interest in that it enhances the effectiveness and efficiency of the NRC's oversight of the licensee's activities at STP by focusing its resources on those SSCs that are most significant to maintaining public health and safety. Likewise, the licensee's resources and attention can be focused on those SSCs that have the highest contribution to plant risk. Further, the licensee's categorization process provides a method for establishing a licensing basis for STP that is consistent with the risk-informed approach in the NRC's reactor oversight process. This enhances the regulatory framework under which STPNOC operates its facility and by which the NRC oversees the licensee's activities.

As discussed further in the **[to be determined]**, SE prepared in support of this exemption, the NRC has concluded that the special circumstances of 10 CFR 50.12(a)(2)(vi) are satisfied in that the licensee has presented a material circumstance (the categorization process) that was not considered when the regulations were adopted and that provides an acceptable method for refining the scope of SSCs to include under the regulations. Furthermore, it is in the

public interest to grant such exemptions. Finally, as required by 10 CFR 50.12(a)(2)(vi), the Executive Director for Operations has consulted with the Commission in the application of this special circumstance during the Commission meeting held on [to be determined].

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not endanger life or property or common defense and security, and is, otherwise, in the public interest. Also, special circumstances are present. Therefore, the Commission hereby partially grants, subject to the conditions described below, STPNOC the exemption from the requirements of 10 CFR 50.49(b) for SSCs at STP categorized as LSS and NRS to the extent that this rule defines the scope of SSCs subject to the requirements of 10 CFR 50.49 except the requirements of 10 CFR 50.49(e)(1) through (7) continue to apply to the extent that these requirements describe the design conditions of (1) temperature and pressure, (2) humidity, (3) chemical effects, (4) radiation, (5) aging, (6) submergence, and (7) synergistic effects. As conditions of this exemption:

- 1. The licensee shall follow the categorization, treatment, and oversight (evaluation and assessment) processes described in its submittal dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, and relied upon by the staff in approving this exemption as discussed in the NRC's SE dated [to be determined]. The licensee has documented these processes in a proposed Final Safety Analysis Report (FSAR) submittal dated May 21, 2001, found acceptable by the staff as the regulatory basis for granting this exemption. The licensee shall incorporate this proposed FSAR submittal into the STP FSAR.
- 2. The licensee shall implement a change control process that incorporates the following requirements:
 - a. Changes to FSAR Section 13.7.2, "Component Categorization Process," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the

- change would decrease the effectiveness of the process in identifying high safety significant and medium safety significant components.
- b. Changes to FSAR Section 13.7.3, "Treatment of Component Categories," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a reduction in the assurance of component functionality.
- c. Changes to FSAR Section 13.7.4, "Continuing Evaluations and Assessments," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a decrease in effectiveness of the evaluations and assessments.
- d. The licensee shall submit a report, as specified in 10 CFR 50.4, of changes made without prior NRC approval pursuant to these provisions. The report shall identify each change and describe the basis for the conclusion that the change does not involve a decrease in effectiveness or assurance as described above. The report shall be submitted within 60 days of the date of the change.
- e. Changes to FSAR Sections 13.7.2, 13.7.3, and 13.7.4 that do not meet the criteria of a through c above shall be submitted to the NRC for prior review and approval.

Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (FR). Accordingly, based upon the environmental assessment, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment.

This exemption is effective upon submittal of a FSAR update pursuant to 10 CFR 50.71(e) incorporating the FSAR Sections described in the conditions above.

Dated at Rockville, Maryland, this day of 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

Under Section 50.55a(f) of Title 10 to the *Code of Federal Regulations*, Part 50, [10 CFR 50.55a(f)], as it applies to STP, pumps and valves that are classified as American Society of Mechanical Engineers, Boiler and Pressure Vessel Code (ASME Code) Code Class 1, 2, or 3 must be designed and be provided with access to enable the performance of inservice testing (IST) for assessing operational readiness as set forth in Section XI of the

applicable edition and addendum of the ASME Code applied to the construction of the particular pump or valve. Further, throughout the service life of STP, pumps and valves that are classified as ASME Code Class 1, 2, and 3 must meet the IST requirements, except design and access provisions, set forth in the applicable edition and addendum of the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code) to the extent practical within the limitations of design, geometry and materials of construction of the components.

By letter dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, (hereinafter, the submittal), STPNOC requested an exemption from the requirements of 10 CFR 50.55a(f) to the extent that it imposes the IST requirements under Section XI of the ASME Code and under the OM Code on safety-related structures, systems, or components (SSCs) at STP categorized as low safety significant (LSS) and non-risk significant (NRS). Also, STPNOC requested an exemption from the requirements of 10 CFR 50.55a(f) to the extent that it imposes the repair and replacement requirements of Section XI of the ASME Code on ASME Code Class 2 and 3 SSCs at STP categorized as LSS or NRS.

3.0 DISCUSSION

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. Under 10 CFR 50.12(a)(2)(vi), special circumstances are present whenever there is any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If the special

circumstance of 10 CFR 50.12(a)(2)(vi) is relied on exclusively, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The NRC has completed its evaluation of STPNOC's request for an exemption from the requirements of 10 CFR 50.55a(f). The NRC's evaluation is provided in a safety evaluation (SE), dated [to be determined], prepared in support of this exemption.

The staff has reviewed STPNOC's integrated SSC categorization process. The categorization process was found to use both a probabilistic and a deterministic based methodology that appropriately addressed the issues of defense-in-depth, safety margins, and aggregate risk impacts. The staff finds the proposed categorization process to be acceptable to categorize the risk significance of both functions and SSCs for use in reducing the scope of SSCs subject to special treatment. The categorization process provides an acceptable method for defining those SSCs for which exemptions from the special treatment requirements can be granted. In support of its finding on the licensee's categorization process, the staff also found that the alternative treatment practices provide the licensee with a framework that, if effectively implemented, can result in safety-related LSS and NRS SSCs remaining capable of performing their safety functions under design-basis conditions. Based on these findings, the staff determined that LSS and NRS SSCs could be excluded from the scope of 10 CFR 50.55a(f) to the extent that it imposes the IST requirements under Section XI of the ASME Code and under the OM Code for ASME Code Class 1, 2, and 3 components without undue risk to public health and safety.

The staff also found that granting of this exemption is in the public interest in that it enhances the effectiveness and efficiency of the NRC's oversight of the licensee's activities at STP by focusing its resources on those SSCs that are most significant to maintaining public

health and safety. Likewise, the licensee's resources and attention can be focused on those SSCs that have the highest contribution to plant risk. Further, the licensee's categorization process provides a method for establishing a licensing basis for STP that is consistent with the risk-informed approach in the NRC's reactor oversight process. This enhances the regulatory framework under which STPNOC operates its facility and by which the NRC oversees the licensee's activities.

As discussed further in the **[to be determined]**, SE prepared in support of this exemption, the NRC has concluded that the special circumstances of 10 CFR 50.12(a)(2)(vi) are satisfied in that the licensee has presented a material circumstance (the categorization process) that was not considered when the regulations were adopted and that provides an acceptable method for refining the scope of SSCs to include under the regulations. Furthermore, it is in the public interest to grant such exemptions. Finally, as required by 10 CFR 50.12(a)(2)(vi), the Executive Director for Operations has consulted with the Commission in the application of this special circumstance during the Commission meeting held on **[to be determined]**.

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not endanger life or property or common defense and security, and is, otherwise, in the public interest. Also, special circumstances are present. Therefore, the Commission hereby grants, subject to the conditions described below, STPNOC the exemption from the requirements of 10 CFR 50.55a(f) to the extent that it imposes the IST requirements under Section XI of the ASME Code and under the OM Code for ASME Code Class 1, 2, and 3 SSCs at STP categorized as LSS or NRS. Further, the NRC determined that 10 CFR 50.55a(f) does not impose the repair and replacement requirements of Section XI of

the ASME Code, therefore an exemption from these requirements is not necessary. As conditions of this exemption:

- 1. The licensee shall follow the categorization, treatment, and oversight (evaluation and assessment) processes described in its submittal dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, and relied upon by the staff in approving this exemption as discussed in the NRC's SE dated [to be determined]. The licensee has documented these processes in a proposed Final Safety Analysis Report (FSAR) submittal dated May 21, 2001, found acceptable by the staff as the regulatory basis for granting this exemption. The licensee shall incorporate this proposed FSAR submittal into the STP FSAR.
- 2. The licensee shall implement a change control process that incorporates the following requirements:
 - a. Changes to FSAR Section 13.7.2, "Component Categorization Process," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would decrease the effectiveness of the process in identifying high safety significant and medium safety significant components.
 - b. Changes to FSAR Section 13.7.3, "Treatment of Component Categories," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a reduction in the assurance of component functionality.
 - c. Changes to FSAR Section 13.7.4, "Continuing Evaluations and Assessments," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a decrease in effectiveness of the evaluations and assessments.
 - d. The licensee shall submit a report, as specified in 10 CFR 50.4, of changes made without prior NRC approval pursuant to these provisions. The report shall identify each change and describe the basis for the conclusion that the change does not involve a decrease in effectiveness or assurance as described above. The report shall be submitted within 60 days of the date of the change.
 - e. Changes to FSAR Sections 13.7.2, 13.7.3, and 13.7.4 that do not meet the criteria of a through c above shall be submitted to the NRC for prior review and approval.

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Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (FR). Accordingly, based upon the environmental assessment, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment.

This exemption is effective upon submittal of a FSAR update pursuant to 10 CFR 50.71(e) incorporating the FSAR Sections described in the conditions above.

Dated at Rockville, Maryland, this

day of

2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

Under Section 50.55a(g) of Title 10 to the *Code of Federal Regulations*, Part 50, [10 CFR 50.55a(g)], as it applies to STP, components that are classified as American Society of Mechanical Engineers, Boiler and Pressure Vessel Code (ASME Code) Class 1, 2, or 3 must be designed and be provided with access to enable the performance of inservice examination of such components and must meet the preservice examination requirements set forth in Section XI of the applicable edition and addendum of the ASME Code applied to the

construction of the particular component. Further, throughout the service life of STP, components (including supports) that are classified as ASME Code Class 1, 2, and 3 must meet the requirements [including those for inservice inspection (ISI), repair, and replacement], except design and access provisions and preservice examination requirements, set forth in Section XI of the applicable edition and addendum of the ASME Code, to the extent practical within the limitations of design, geometry and materials of construction of the components.

By letter dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, (hereinafter, the submittal), STPNOC requested an exemption from the requirements of 10 CFR 50.55a(g) to the extent that it imposes the ISI requirements of Section XI of the ASME Code on ASME Code Class 1, 2, and 3 safety-related structures, systems, and components (SSCs) at STP categorized as low safety significant (LSS) or non-risk significant (NRS). Also, STPNOC requested an exemption from the requirements of 10 CFR 50.55a(g) to the extent that it imposes the repair and replacement requirements of Section XI of the ASME Code on ASME Code Class 2 and 3 SSCs at STP categorized as LSS or NRS.

3.0 <u>DISCUSSION</u>

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. Under 10 CFR 50.12(a)(2)(vi), special circumstances are present whenever there is any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If the special

circumstance of 10 CFR 50.12(a)(2)(vi) is relied on exclusively, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The NRC has completed its evaluation of STPNOC's request for an exemption from the requirements of 10 CFR 50.55a(g). The NRC's evaluation is provided in a safety evaluation (SE), dated [to be determined], prepared in support of this exemption.

The staff has reviewed STPNOC's integrated SSC categorization process. The categorization process was found to use both a probabilistic and a deterministic based methodology that appropriately addressed the issues of defense-in-depth, safety margins, and aggregate risk impacts. The staff finds the proposed categorization process to be acceptable to categorize the risk significance of both functions and SSCs for use in reducing the scope of SSCs subject to special treatment. The categorization process provides an acceptable method for defining those SSCs for which exemptions from the special treatment requirements can be granted. In support of its finding on the licensee's categorization process, the staff also found that the alternative treatment practices provide the licensee with a framework that, if effectively implemented, can result in safety-related LSS and NRS SSCs remaining capable of performing their safety functions under design-basis conditions. Based on these findings, the staff determined that LSS and NRS SSCs could be excluded from the scope of 10 CFR 50.55a(g) without undue risk to public health and safety to the extent that 10 CFR 50.55a(g) imposes the ISI requirements for ASME Code Class 1, 2, and 3 components, and the repair and replacement requirements for ASME Code Class 2 and 3 components, of Section XI of the ASME Code.

The staff also found that granting of this exemption is in the public interest in that it enhances the effectiveness and efficiency of the NRC's oversight of the licensee's activities at STP by focusing its resources on those SSCs that are most significant to maintaining public

health and safety. Likewise, the licensee's resources and attention can be focused on those SSCs that have the highest contribution to plant risk. Further, the licensee's categorization process provides a method for establishing a licensing basis for STP that is consistent with the risk-informed approach in the NRC's reactor oversight process. This enhances the regulatory framework under which STPNOC operates its facility and by which the NRC oversees the licensee's activities.

As discussed further in the **[to be determined]**, SE prepared in support of this exemption, the NRC has concluded that the special circumstances of 10 CFR 50.12(a)(2)(vi) are satisfied in that the licensee has presented a material circumstance (the categorization process) that was not considered when the regulations were adopted and that provides an acceptable method for refining the scope of SSCs to include under the regulations. Furthermore, it is in the public interest to grant such exemptions. Finally, as required by 10 CFR 50.12(a)(2)(vi), the Executive Director for Operations has consulted with the Commission in the application of this special circumstance during the Commission meeting held on **[to be determined]**.

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemptions are authorized by law, will not endanger life or property or common defense and security, and is, otherwise, in the public interest. Also, special circumstances are present. Therefore, the Commission hereby grants, subject to the conditions described below, STPNOC the exemption from the requirements of 10 CFR 50.55a(g) to the extent that it imposes the ISI requirements of Section XI of the ASME Code on ASME Code Class 1, 2, and 3 safety-related SSCs at STP categorized as LSS or NRS. Further, the Commission hereby grants, subject to the conditions described below, STPNOC the exemption from the requirements of 10 CFR 50.55a(g) to the extent that it imposes the repair and replacement requirements of

Section XI of the ASME Code on ASME Code Class 2 and 3 SSCs at STP categorized as LSS or NRS. As conditions of these exemptions:

- 1. The licensee shall follow the categorization, treatment, and oversight (evaluation and assessment) processes described in its submittal dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, and relied upon by the staff in approving this exemption as discussed in the NRC's SE dated [to be determined]. The licensee has documented these processes in a proposed Final Safety Analysis Report (FSAR) submittal dated May 21, 2001, found acceptable by the staff as the regulatory basis for granting this exemption. The licensee shall incorporate this proposed FSAR submittal into the STP FSAR.
- 2. The licensee shall implement a change control process that incorporates the following requirements:
 - a. Changes to FSAR Section 13.7.2, "Component Categorization Process," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would decrease the effectiveness of the process in identifying high safety significant and medium safety significant components.
 - b. Changes to FSAR Section 13.7.3, "Treatment of Component Categories," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a reduction in the assurance of component functionality.
 - c. Changes to FSAR Section 13.7.4, "Continuing Evaluations and Assessments," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a decrease in effectiveness of the evaluations and assessments.
 - d. The licensee shall submit a report, as specified in 10 CFR 50.4, of changes made without prior NRC approval pursuant to these provisions. The report shall identify each change and describe the basis for the conclusion that the change does not involve a decrease in effectiveness or assurance as described above. The report shall be submitted within 60 days of the date of the change.
 - e. Changes to FSAR Sections 13.7.2, 13.7.3, and 13.7.4 that do not meet the criteria of a through c above shall be submitted to the NRC for prior review and approval.

Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (FR). Accordingly, based upon the environmental assessment, the Commission has determined that the granting

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of this exemption will not have a significant effect on the quality of the human environment.

This exemption is effective upon submittal of a FSAR update pursuant to 10 CFR 50.71(e) incorporating the FSAR Sections described in the conditions above.

Dated at Rockville, Maryland, this

day of

2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

Under Section 50.55a(h)(2) of Title 10 to the *Code of Federal Regulations*, Part 50, [10 CFR 50.55a(h)(2)] for nuclear power plants with construction permits issued after January 1, 1971, but before May 13, 1999, protection systems must meet the requirements stated in either Institute of Electrical and Electronics Engineers (IEEE) Std. 279, "Criteria for Protection Systems for Nuclear Power Generating Stations," or in IEEE Std. 603-1991, "Criteria for Safety Systems for Nuclear Power Generating Stations," and the correction sheet dated

January 30, 1995. STPNOC is committed to meet IEEE 279-1971. The scope of IEEE 279 states that this standard establishes the minimum safety-related functional performance and reliability requirements for protection systems in a nuclear power plant. Fulfillment of these requirements does not necessarily establish the adequacy of protective system functional performance and reliability, but failure to fulfill any of these requirements usually indicates system inadequacy.

By letter dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, (hereinafter, the submittal), STPNOC requested an exemption from the requirements of 10 CFR 50.55a(h) to the extent that it imposes the requirements of Sections 4.3 and 4.4 of IEEE 279 on structures, systems, and components (SSCs) categorized as low safety significant (LSS) and non-risk significant (NRS), using the licensee's categorization process. Section 4.3 of IEEE 279 contains requirements for the quality of components and modules. Section 4.4 of IEEE 279 contains requirements for equipment qualification. The other requirements listed in IEEE 279, including functional and design requirements, will continue to be applied.

3.0 <u>DISCUSSION</u>

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. Under 10 CFR 50.12(a)(2)(vi), special circumstances are present whenever there is any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If the special circumstance of 10 CFR 50.12(a)(2)(vi) is relied on exclusively, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The NRC has completed its evaluation of STPNOC's request for an exemption from the requirements of 10 CFR 50.55a(h)(2). The NRC's evaluation is provided in a safety evaluation (SE), dated [to be determined], prepared in support of this exemption.

The staff has reviewed STPNOC's integrated SSC categorization process. The categorization process was found to use both a probabilistic and a deterministic based methodology that appropriately addressed the issues of defense-in-depth, safety margins, and aggregate risk impacts. The staff finds the proposed categorization process to be acceptable to categorize the risk significance of both functions and SSCs for use in reducing the scope of SSCs subject to special treatment. The categorization process provides an acceptable method for defining those SSCs for which exemptions from the special treatment requirements can be granted. In support of its finding on the licensee's categorization process, the staff also found that the alternative treatment practices provide the licensee with a framework that, if effectively implemented, can result in safety-related LSS and NRS SSCs remaining capable of performing their safety functions under design-basis conditions. Based on these findings, the staff determined that LSS and NRS SSCs could be excluded from the scope of 10 CFR 50.55a(h)(2) to the extent that it imposes the requirements of Sections 4.3 and 4.4 of IEEE 279 on LSS and NRS SSCs without undue risk to public health and safety.

The staff also found that granting of this exemption is in the public interest in that it enhances the effectiveness and efficiency of the NRC's oversight of the licensee's activities at STP by focusing its resources on those SSCs that are most significant to maintaining public health and safety. Likewise, the licensee's resources and attention can be focused on those SSCs that have the highest contribution to plant risk. Further, the licensee's categorization process provides a method for establishing a licensing basis for STP that is consistent with the risk-informed approach in the NRC's reactor oversight process. This enhances the regulatory

framework under which STPNOC operates its facility and by which the NRC oversees the licensee's activities.

As discussed further in the **[to be determined]**, SE prepared in support of this exemption, the NRC has concluded that the special circumstances of 10 CFR 50.12(a)(2)(vi) are satisfied in that the licensee has presented a material circumstance (the categorization process) that was not considered when the regulations were adopted and that provides an acceptable method for refining the scope of SSCs to include under the regulations. Furthermore, it is in the public interest to grant such exemptions. Finally, as required by 10 CFR 50.12(a)(2)(vi), the Executive Director for Operations has consulted with the Commission in the application of this special circumstance during the Commission meeting held on **[to be determined]**.

4.0 <u>CONCLUSION</u>

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not endanger life or property or common defense and security, and is, otherwise, in the public interest. Also, special circumstances are present. Therefore, the Commission hereby grants, subject to the conditions described below, STPNOC the exemption from the requirements of 10 CFR 50.55a(h)(2) to the extent that it imposes the requirements of Sections 4.3 and 4.4 of IEEE 279 on SSCs at STP categorized as LSS and NRS. As conditions of this exemption:

- 1. The licensee shall follow the categorization, treatment, and oversight (evaluation and assessment) processes described in its submittal dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, and relied upon by the staff in approving this exemption as discussed in the NRC's SE dated [to be determined]. The licensee has documented these processes in a proposed Final Safety Analysis Report (FSAR) submittal dated May 21, 2001, found acceptable by the staff as the regulatory basis for granting this exemption. The licensee shall incorporate this proposed FSAR submittal into the STP FSAR.
- 2. The licensee shall implement a change control process that incorporates the following requirements:

- a. Changes to FSAR Section 13.7.2, "Component Categorization Process," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would decrease the effectiveness of the process in identifying high safety significant and medium safety significant components.
- b. Changes to FSAR Section 13.7.3, "Treatment of Component Categories," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a reduction in the assurance of component functionality.
- c. Changes to FSAR Section 13.7.4, "Continuing Evaluations and Assessments," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a decrease in effectiveness of the evaluations and assessments.
- d. The licensee shall submit a report, as specified in 10 CFR 50.4, of changes made without prior NRC approval pursuant to these provisions. The report shall identify each change and describe the basis for the conclusion that the change does not involve a decrease in effectiveness or assurance as described above. The report shall be submitted within 60 days of the date of the change.
- e. Changes to FSAR Sections 13.7.2, 13.7.3, and 13.7.4 that do not meet the criteria of a through c above shall be submitted to the NRC for prior review and approval.

Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (FR). Accordingly, based upon the environmental assessment, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment.

This exemption is effective upon submittal of a FSAR update pursuant to 10 CFR 50.71(e) incorporating the FSAR Sections described in the conditions above.

Dated at Rockville, Maryland, this day of 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

Under Section 50.59 of Title 10 to the *Code of Federal Regulations*, Part 50, (10 CFR 50.59) requirements were established by which licensees could make changes to their facilities without prior NRC approval. For changes to the facility as described in the Final Safety Analysis Report (FSAR) (or to procedures as described in the FSAR), the licensee is to perform an evaluation of the change to determine whether certain conditions are met – if so, prior NRC approval for the change is required. The purpose of the rule is to ensure that the NRC has the

opportunity to review changes of potential significance to the basis for licensing of the facility before they are implemented. The rule requires licensees to review proposed changes, and if they meet criteria that are related to accident probability or consequences, to seek prior NRC review and approval before implementing the particular change.

As discussed in a rulemaking that revised the 10 CFR 50.59 requirements published on October 4, 1999, (64 FR 53582) the rule was originally established to allow licensees the ability to make certain changes to their facilities, but also to preserve the functional requirements and information included in the FSAR on how the facilities, including its structures, systems, and components (SSCs), conform with NRC requirements for design, construction, and operation of the plant. The rule revision was intended to clarify which changes require evaluation and which changes require prior NRC approval.

By letter dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, (hereinafter, the submittal), the licensee requested an exemption from the requirements of 10 CFR 50.59 [in particular, Paragraphs 50.59(c)(1), 50.59(c)(2) and 50.59(d)(1) of the revised rule] to perform a written evaluation for changes in special treatment requirements for low safety significant (LSS) and non-risk significant (NRS) SSCs. STPNOC further requested an exemption from the requirement to seek prior NRC approval for such changes to the extent that they fall within the listed criteria in 10 CFR 50.59.

3.0 DISCUSSION

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special

circumstances are present. Special circumstances are present under 10 CFR 50.12(a)(2)(ii) when application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule.

The NRC has completed its evaluation of STPNOC's request for an exemption from the requirements of 10 CFR 50.59 [Sections 50.59(c)(1), 50.59(c)(2) and 50.59(d)(1) under the revised rule]. The NRC's evaluation is provided in a safety evaluation (SE), dated **[to be determined]**, prepared in support of this exemption. The FSAR for STP includes descriptions of many of the special treatment requirements as presently applied to SSCs. As such, the proposed approach described in the licensee's submittal that revises treatment applied to SSCs based on the results of the categorization process will result in changes to the descriptions of this treatment in the FSAR. These changes to the FSAR would fall within the scope of those requiring evaluation, and possibly prior NRC review and approval, pursuant to 10 CFR 50.59. STPNOC is proposing that it would not be required to evaluate FSAR changes that result from changes in the treatment for SSCs categorized as LSS or NRS or to seek prior NRC review and approval for these changes pursuant to 10 CFR 50.59. The exemption request does not extend to changes to functional requirements for SSCs that are described in the FSAR.

In the licensee's submittal, it requested exemptions from certain special treatment and process requirements in 10 CFR 21.3; 10 CFR 50.34(b)(6)(ii); 10 CFR 50.34(b)(10); 10 CFR 50.34(b)(11); 10 CFR 50.49(b); 10 CFR 50.54(a)(3); 10 CFR 50.55a(f); 10 CFR 50.55a(g); 10 CFR 50.55a(h); 10 CFR 50.65(b); 10 CFR Part 50, Appendix A, General Design Criterion (GDC) 1, GDC 2, GDC 4, and GDC 18; 10 CFR Part 50, Appendix B; 10 CFR 50, Appendix J, Option B, Section III.B; and 10 CFR Part 100, Appendix A, Sections VI(a)(1) and (2). These exemption requests are being made to enable STPNOC to apply certain requirements in a graded manner based upon the safety/risk significance of the SSCs.

The NRC's SE dated **[to be determined]**, provides a complete description of the extent of the requested exemptions from these regulations. The regulations for which exemptions are being sought include "special treatment" requirements, such as qualification, inspection, testing, monitoring, and quality assurance requirements.

As noted, the purpose of the requirements in 10 CFR 50.59 is for licensees to assess proposed changes in order to identify when NRC review is needed. As part of the overall exemption review, NRC has reviewed the categorization methodologies used to determine the risk significance of SSCs. Further, NRC has reviewed the elements of the treatment processes proposed by the licensee that would be applicable to the various categories of SSCs. The specific changes to FSAR requirements resulting from use of these processes is part of the implementation process following the granting of the exemptions to the special treatment requirements of 10 CFR Parts 21, 50, and 100. Therefore, requiring an additional review of individual changes to the FSAR with respect to the exemptions from the special treatment requirements, for the purposes of deciding on the need for NRC prior approval, is unnecessary in that NRC review of the licensee's processes that will lead to those detailed FSAR changes was performed during the review of the requested exemptions. As previously noted, the scope of the exemption requested from 10 CFR 50.59 is only for changes concerning special treatment requirements for SSCs categorized as LSS or NRS. Any other changes to the facility (or procedures) as described in the FSAR, even if they relate to LSS or NRS SSCs, would not be exempted from the requirements of 10 CFR 50.59.

The NRC concluded that the intent of the underlying regulation (10 CFR 50.59) for prior NRC approval of particular changes contained in the submittal is satisfied by the review conducted for the exemptions from the special treatment requirements of 10 CFR Parts 21, 50,

and 100. Thus, application of the rule to the particular instances of changes to specific special treatment as described in the FSAR is not necessary.

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not endanger life or property or common defense and security, and is, otherwise, in the public interest. Also, special circumstances are present. Therefore, the Commission hereby grants, subject to the conditions described below, STPNOC the exemption from the requirements of 10 CFR 50.59(c)(1), (c)(2), and (d)(1) to the extent that they require the licensee to perform a written evaluation for changes to the STP FSAR, and to seek prior NRC approval of these changes, resulting from the exemptions granted to the requirements of 10 CFR Parts 21, 50, and 100 requested in the licensee's submittal. All other changes to the FSAR, even those associated with LSS and NRS SSCs, are not included within the scope of the exemption granted. As conditions of this exemption:

- 1. The licensee shall follow the categorization, treatment, and oversight (evaluation and assessment) processes described in its submittal dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, and relied upon by the staff in approving this exemption as discussed in the NRC's SE dated [to be determined]. The licensee has documented these processes in a proposed FSAR submittal dated May 21, 2001, found acceptable by the staff as the regulatory basis for granting this exemption. The licensee shall incorporate this proposed FSAR submittal into the STP FSAR.
- 2. The licensee shall implement a change control process that incorporates the following requirements:
 - a. Changes to FSAR Section 13.7.2, "Component Categorization Process," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would decrease the effectiveness of the process in identifying high safety significant and medium safety significant components.
 - b. Changes to FSAR Section 13.7.3, "Treatment of Component Categories," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a reduction in the assurance of component functionality.

- c. Changes to FSAR Section 13.7.4, "Continuing Evaluations and Assessments," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a decrease in effectiveness of the evaluations and assessments.
- d. The licensee shall submit a report, as specified in 10 CFR 50.4, of changes made without prior NRC approval pursuant to these provisions. The report shall identify each change and describe the basis for the conclusion that the change does not involve a decrease in effectiveness or assurance as described above. The report shall be submitted within 60 days of the date of the change.
- e. Changes to FSAR Sections 13.7.2, 13.7.3, and 13.7.4 that do not meet the criteria of a through c above shall be submitted to the NRC for prior review and approval.

Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (FR). Accordingly, based upon the environmental assessment, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment.

This exemption is effective upon submittal of a FSAR update pursuant to 10 CFR 50.71(e) incorporating the FSAR Sections described in the conditions above.

Dated at Rockville, Maryland, this day of 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

Under Section 50.65(b) of Title 10 to the *Code of Federal Regulations*, Part 50, [10 CFR 50.65(b)] criteria were established that defined the scope of components to be subject to the requirements of 10 CFR 50.65 (the Maintenance Rule). As defined under 10 CFR 50.65(b), the scope of the Maintenance Rule includes "(1) safety-related structures, systems and components that are relied upon to remain functional during and following design-

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basis events to ensure the integrity of the reactor coolant pressure boundary, the capability to shut down the reactor and maintain it in a safe shutdown condition, or the capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposure comparable to the guidelines in §50.34(a)(1), §50.67(b)(2), or §100.11 of this chapter, as applicable;" (2) nonsafety-related structures, systems, or components (i) "[t]hat are relied upon to mitigate accidents or transients or are used in plant emergency operating procedures (EOPs)[,]" or (ii) "[w]hose failure could prevent safety-related structures, systems, and components from fulfilling their safety-related function[,]" or (iii) "[w]hose failure could cause a reactor scram or actuation of a safety-related system."

By letter dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, (hereinafter, the submittal), STPNOC requested an exemption from the requirements of 10 CFR 50.65(b) to exclude structures, systems, and components (SSCs) categorized as low safety significant (LSS) and non-risk significant (NRS) from the scope of the Maintenance Rule, with the exception that the requirements of 10 CFR 50.65(a)(4) would continue to apply.

3.0 <u>DISCUSSION</u>

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. Under 10 CFR 50.12(a)(2)(vi), special circumstances are present whenever there is any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If 10 CFR

50.12(a)(2)(vi) is relied on exclusively for satisfying the special circumstances provision of 10 CFR 50.12(a)(2), the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The NRC has completed its evaluation of STPNOC's request for an exemption from the requirements of 10 CFR 50.65(b). The NRC's evaluation is provided in a safety evaluation (SE), dated [to be determined], prepared in support of this exemption. The NRC evaluated the consequence of excluding LSS and NRS SSCs from scope of the Maintenance Rule.

Information provided by the licensee in the submittal sufficiently describes a risk-informed categorization process that can identify a class of SSCs (LSS and NRS) that have little or no safety significance. The overall STPNOC process provides for adequate oversight to validate and recognize changes in safety significance and degradation in LSS and NRS SSCs.

The staff has reviewed STPNOC's integrated SSC categorization process. The categorization process was found to use both a probabilistic and a deterministic based methodology that appropriately addressed the issues of defense-in-depth, safety margins, and aggregate risk impacts. The staff finds the proposed categorization process to be acceptable to categorize the risk significance of both functions and SSCs for use in reducing the scope of SSCs subject to special treatment. The categorization process provides an acceptable method for defining those SSCs for which exemptions from the special treatment requirements can be granted. In support of its finding on the licensee's categorization process, the staff also found that the alternative treatment practices provide the licensee with a framework that, if effectively implemented, can result in safety-related LSS and NRS SSCs remaining capable of performing their safety functions under design-basis conditions. Based on these findings, the staff determined that LSS and NRS SSCs could be excluded from the scope of 10 CFR 50.65, with

the exception that the requirements of 10 CFR 50.65(a)(4) would continue to apply, without undue risk to public health and safety.

The staff also found that granting of this exemption is in the public interest in that it enhances the effectiveness and efficiency of the NRC's oversight of the licensee's activities at STP by focusing its resources on those SSCs that are most significant to maintaining public health and safety. Likewise, the licensee's resources and attention can be focused on those SSCs that have the highest contribution to plant risk. Further, the licensee's categorization process provides a method for establishing a licensing basis for STP that is consistent with the risk-informed approach in the NRC's reactor oversight process. This enhances the regulatory framework under which STPNOC operates its facility and by which the NRC oversees the licensee's activities.

As discussed further in the **[to be determined]**, SE prepared in support of this exemption, the NRC has concluded that the special circumstances of 10 CFR 50.12(a)(2)(vi) are satisfied in that the licensee has presented a material circumstance (the categorization process) that was not considered when the regulations were adopted and that provides an acceptable method for refining the scope of SSCs to include under the regulations. Furthermore, it is in the public interest to grant such exemptions. Finally, as required by 10 CFR 50.12(a)(2)(vi), the Executive Director for Operations has consulted with the Commission in the application of this special circumstance during the Commission meeting held on **[to be determined]**.

4.0 <u>CONCLUSION</u>

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not endanger life or property or common defense and security, and is, otherwise, in the public interest. Also, special circumstances are present.

Therefore, the Commission hereby grants, subject to the conditions described below, STPNOC the exemption from the requirements of 10 CFR 50.65(b) for SSCs at STP categorized as LSS and NRS to the extent that this rule defines the scope of SSCs subject to the requirements of 10 CFR 50.65(a)(1), (a)(2), and (a)(3). The requirements of 10 CFR 50.65(a)(4) continue to apply to the scope of all SSCs defined under 10 CFR 50.65(b). As conditions of this exemption:

- 1. The licensee shall follow the categorization, treatment, and oversight (evaluation and assessment) processes described in its submittal dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, and relied upon by the staff in approving this exemption as discussed in the NRC's SE dated [to be determined]. The licensee has documented these processes in a proposed Final Safety Analysis Report (FSAR) submittal dated May 21, 2001, found acceptable by the staff as the regulatory basis for granting this exemption. The licensee shall incorporate this proposed FSAR submittal into the STP FSAR.
- 2. The licensee shall implement a change control process that incorporates the following requirements:
 - a. Changes to FSAR Section 13.7.2, "Component Categorization Process," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would decrease the effectiveness of the process in identifying high safety significant and medium safety significant components.
 - b. Changes to FSAR Section 13.7.3, "Treatment of Component Categories," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a reduction in the assurance of component functionality.
 - c. Changes to FSAR Section 13.7.4, "Continuing Evaluations and Assessments," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a decrease in effectiveness of the evaluations and assessments.
 - d. The licensee shall submit a report, as specified in 10 CFR 50.4, of changes made without prior NRC approval pursuant to these provisions. The report shall identify each change and describe the basis for the conclusion that the change does not involve a decrease in effectiveness or assurance as described above. The report shall be submitted within 60 days of the date of the change.

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e. Changes to FSAR Sections 13.7.2, 13.7.3, and 13.7.4 that do not meet the criteria of a through c above shall be submitted to the NRC for prior review and approval.

Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (FR). Accordingly, based upon the environmental assessment, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment.

This exemption is effective upon submittal of a FSAR update pursuant to 10 CFR 50.71(e) incorporating the FSAR Sections described in the conditions above.

Dated at Rockville, Maryland, this

day of

2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 DENIAL OF EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

The General Design Criteria (GDC) of Appendix A to Title 10 of the *Code of Federal Regulations* Part 50 (10 CFR Part 50, Appendix A), establish minimum requirements for the principal design criteria for water-cooled nuclear power plants. The underlying purpose of the GDC is to establish the necessary design, fabrication, construction, testing, and performance requirements for structures, systems, and components (SSCs) important to safety; that is, SSCs that provide reasonable assurance that the facility can be operated without undue risk to the health and safety of the public. By letter dated July 13, 1999, as supplemented, October 14

and 22, 1999, January 26, and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, (hereinafter, the submittal), the licensee requested an exemption from the requirements of 10 CFR Part 50, Appendix A, GDC 1, "Quality Standards and Records," GDC 2, "Design Bases for Protection Against Natural Phenomena," GDC 4, "Environmental and Dynamic Effects Design Bases," and GDC 18, "Inspection and Testing of Electric Power Systems." The scope of the exemption is limited to those safety-related SSCs that are categorized in accordance with the licensee's risk-informed categorization process as low safety significant (LSS) or non-risk significant (NRS).

3.0 DISCUSSION

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. Special circumstances are present under 10 CFR 50.12(a)(2)(i) whenever application of the regulation in the particular circumstances conflicts with other rules or requirements of the Commission. Under 10 CFR 50.12(a)(2)(ii), special circumstances are present when application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule. Special circumstances are present pursuant to 10 CFR 50.12(a)(2)(iii) when compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated. Special circumstances are present under 10 CFR 50.12(a)(2)(iv) whenever an exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the granting of the exemption. Special circumstances

are present under 10 CFR 50.12(a)(2)(v) whenever the exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation. Special circumstances are present under 10 CFR 50.12(a)(2)(vi) whenever there is any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If 10 CFR 50.12(a)(2)(vi) is relied on exclusively for satisfying the special circumstances provision of 10 CFR 50.12(a)(2), the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The NRC has completed its evaluation of STPNOC's request for an exemption from the requirements of GDC 1, GDC 2, GDC 4, and GDC 18. The NRC has determined that an exemption from these requirements is not appropriate as documented in the safety evaluation (SE) dated [to be determined], prepared in support of the licensee's exemption request.

GDC 1 states, in part, that plant equipment shall be designed, fabricated, erected, and tested to quality standards that are commensurate with the importance of the safety function performed. GDC 1 additionally requires that a quality assurance program (QAP) shall be established and implemented to provide adequate assurance that plant equipment is functional, and that appropriate records be maintained for various activities. The NRC concluded that even for LSS and NRS SSCs it remains necessary (1) to use appropriate standards (as available and applicable) commensurate with the risk significance, (2) to establish and implement a QAP, (3) to maintain plant records as determined by the licensee, and (4) for the licensee to have confidence, commensurate with their risk significance, that LSS and NRS SSCs will be capable of functioning under design-basis conditions. Further, as discussed in the SE dated [to be determined], prepared in support of the licensee's exemption requests, the NRC has determined that it should deny the related licensee requests for exemptions from

10 CFR 50.34(b)(6)(ii) that requires the QAP be described in the Final Safety Analysis Report and 10 CFR 50.54(a)(3) that requires the licensee to submit certain changes to the QAP to the NRC for review and approval. In part, the basis for the NRC's determination to deny these related exemption requests is that the NRC found that the application of a risk-informed categorization process or changes to special treatment requirements applied to safety-related SSCs does not affect the underlying purpose of the requirements. Also, the licensee has submitted a revision to the STP QAP that meets the requirements of GDC 1 for LSS and NRS SSCs as discussed in the SE, dated [to be determined], prepared in support of the licensee's requested exemptions. As such, the NRC determined that an exemption from GDC 1 is not necessary as the licensee's submittal continues to meet the requirements of GDC 1.

The licensee requested exemptions to GDC 2, 4, and 18 to the extent that they require tests and inspections to (1) demonstrate that SSCs are designed to withstand the effects of natural phenomena without loss of capability to perform their safety functions (GDC 2), (2) are able to withstand environmental effects (GDC 4), and (3) be performed for individual features, such as wiring, insulation, connections, switchboards, relays, switches, and buses (GDC 18). The NRC determined that GDC 2, GDC 4, and GDC 18, specify design requirements and do not require tests and/or inspections to be performed. Other regulations, from which the licensee has requested exemptions, specify testing and/or inspection requirements on SSCs. Further, the licensee has stated that safety-related LSS and NRS SSCs would be designed to satisfy original design requirements, including the design requirements of GDC 2, GDC 4, and GDC 18. Therefore, the NRC determined that an exemption from these regulations is not necessary, as the licensee will continue to maintain the design of safety-related LSS and NRS SSCs consistent with the design requirements of GDC 2, GDC 4, and GDC 18.

Further, the NRC has found that none of the special circumstances described under 10 CFR 50.12(a)(2) that are necessary for the Commission to grant the exemptions are satisfied with regard to the specific requirements of GDC 1, GDC 2, GDC 4, and GDC 18. There are no conflicts with other rules or requirements of the Commission, the underlying purpose of the rules would not be met by granting the exemptions, compliance with the rules would not result in undue hardship or excessive costs, granting the exemptions would not result in either a benefit to the public health and safety or a decrease in safety, STPNOC is not seeking temporary relief from the regulations, and there are no other material circumstances not previously considered for which it would be in the public interest to grant the exemptions.

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemptions are not appropriate. Further, the Commission has determined that special circumstances are not present. Therefore, the Commission hereby denies STPNOC the exemptions requested from the requirements of GDC 1, GDC 2, GDC 4, and GDC 18 for STP.

Dated at Rockville, Maryland, this day of 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

In the introduction to Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," of Title 10 of the *Code of Federal Regulations* Part 50 (10 CFR Part 50, Appendix B), it states that nuclear power plants "include structures, systems, and components [SSCs] that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public. This appendix establishes quality

assurance requirements for the design, construction, and operation of those structures, systems, and components. The pertinent requirements of this appendix apply to all activities affecting the safety-related functions of those structures, systems, and components; these activities include designing, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, and modifying." Under 10 CFR Part 50, Appendix B, there are 18 criteria to be met by the licensee's quality assurance program. These 18 criteria are (I) Organization, (II) Quality Assurance Program, (III) Design Control, (IV) Procurement Document Control, (V) Instructions, Procedures, and Drawings, (VI) Document Control, (VII) Control of Purchased Material, Equipment, and Services, (VIII) Identification and Control of Materials, Parts, and Components, (IX) Control of Special Processes, (X) Inspection, (XI) Test Control, (XII) Control of Measuring and Test Equipment, (XIII) Handling, Storage, and Shipping, (XIV) Inspection, Test, and Operating Status, (XV) Nonconforming Materials, Parts, or Components, (XVI) Corrective Action, (XVII) Quality Assurance Records, and (XVIII) Audits.

By letter dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, (hereinafter, the submittal), the licensee requested an exemption from the definition of scope of SSCs to be covered by the rule in the introduction of 10 CFR Part 50, Appendix B, to the extent that it imposes the requirements of 15 of the 18 criteria on SSCs categorized as low safety significant (LSS) or non-risk significant (NRS) in accordance with the licensee's categorization process. The three criteria that are not included within the scope of the licensee exemption request and that will continue to be applied to activities associated with all safety-related SSCs (including

LSS and NRS SSCs) are Criterion III, "Design Control," Criterion XV, "Nonconforming Materials, Parts, or Components," and Criterion XVI, "Corrective Action."

3.0 DISCUSSION

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. Under 10 CFR 50.12(a)(2)(vi), special circumstances are present whenever there is any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If the special circumstance of 10 CFR 50.12(a)(2)(vi) is relied on exclusively, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The NRC has completed its evaluation of STPNOC's request for an exemption from the requirements of 10 CFR Part 50, Appendix B (excluding the requirements of Criteria III, XV, and XVI). The NRC's evaluation is provided in a safety evaluation (SE) dated [to be determined], prepared in support of this exemption.

The staff has reviewed STPNOC's integrated SSC categorization process. The categorization process was found to use both a probabilistic and a deterministic based methodology that appropriately addressed the issues of defense-in-depth, safety margins, and aggregate risk impacts. The staff finds the proposed categorization process to be acceptable to categorize the risk significance of both functions and SSCs for use in reducing the scope of SSCs subject to special treatment. The categorization process provides an acceptable method for defining those SSCs for which exemptions from the special treatment requirements can be

granted. In support of its finding on the licensee's categorization process, the staff also found that the alternative treatment practices provide the licensee with a framework that, if effectively implemented, can result in safety-related LSS and NRS SSCs remaining capable of performing their safety functions under design-basis conditions. Based on these findings, the staff determined that LSS and NRS SSCs could be excluded from the scope of 10 CFR Part 50, Appendix B (the requirements of Criteria III, XV, and XVI would continue to apply), without undue risk to public health and safety.

The staff also found that granting of this exemption is in the public interest in that it enhances the effectiveness and efficiency of the NRC's oversight of the licensee's activities at STP by focusing its resources on those SSCs that are most significant to maintaining public health and safety. Likewise, the licensee's resources and attention can be focused on those SSCs that have the highest contribution to plant risk. Further, the licensee's categorization process provides a method for establishing a licensing basis for STP that is consistent with the risk-informed approach in the NRC's reactor oversight process. This enhances the regulatory framework under which STPNOC operates its facility and by which the NRC oversees the licensee's activities.

As discussed further in the **[to be determined]**, SE prepared in support of this exemption, the NRC has concluded that the special circumstances of 10 CFR 50.12(a)(2)(vi) are satisfied in that the licensee has presented a material circumstance (the categorization process) that was not considered when the regulations were adopted and that provides an acceptable method for refining the scope of SSCs to include under the regulations. Furthermore, it is in the public interest to grant such exemptions. Finally, as required by 10 CFR 50.12(a)(2)(vi), the

Executive Director for Operations has consulted with the Commission in the application of this special circumstance during the Commission meeting held on [to be determined].

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not endanger life or property or common defense and security, and is, otherwise, in the public interest. Also, special circumstances are present. Therefore, the Commission hereby grants, subject to the conditions described below, STPNOC the exemption from the definition of the scope of SSCs to be covered by the rule in the introduction of 10 CFR Part 50, Appendix B, to the extent that it imposes the requirements of Criteria I, II, IV, V, VI, VII, VIII, IX, X, XI, XIII, XIII, XIV, XVII, and XVIII for SSCs at STP categorized as LSS and NRS. The requirements imposed by Criteria III, XV, and XVI of 10 CFR Part 50, Appendix B, continue to apply to all safety-related SSCs. As conditions of this exemption:

- 1. The licensee shall follow the categorization, treatment, and oversight (evaluation and assessment) processes described in its submittal dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, and relied upon by the staff in approving this exemption as discussed in the NRC's SE dated [to be determined]. The licensee has documented these processes in a proposed Final Safety Analysis Report (FSAR) submittal dated May 21, 2001, found acceptable by the staff as the regulatory basis for granting this exemption. The licensee shall incorporate this proposed FSAR submittal into the STP FSAR.
- 2. The licensee shall implement a change control process that incorporates the following requirements:
 - a. Changes to FSAR Section 13.7.2, "Component Categorization Process," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would decrease the effectiveness of the process in identifying high safety significant and medium safety significant components.

- b. Changes to FSAR Section 13.7.3, "Treatment of Component Categories," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a reduction in the assurance of component functionality.
- c. Changes to FSAR Section 13.7.4, "Continuing Evaluations and Assessments," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a decrease in effectiveness of the evaluations and assessments.
- d. The licensee shall submit a report, as specified in 10 CFR 50.4, of changes made without prior NRC approval pursuant to these provisions. The report shall identify each change and describe the basis for the conclusion that the change does not involve a decrease in effectiveness or assurance as described above. The report shall be submitted within 60 days of the date of the change.
- e. Changes to FSAR Sections 13.7.2, 13.7.3, and 13.7.4 that do not meet the criteria of a through c above shall be submitted to the NRC for prior review and approval.

Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (FR). Accordingly, based upon the environmental assessment, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment.

This exemption is effective upon submittal of a FSAR update pursuant to 10 CFR 50.71(e) incorporating the FSAR Sections described in the conditions above.

Dated at Rockville, Maryland, this day of 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

DRAFT

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

Under Option B of Appendix J to Title 10 of the *Code of Federal Regulations* Part 50 (10 CFR Part 50, Appendix J, Option B) a performance based set of testing requirements is provided to ensure that leakage through primary reactor containments for water cooled power reactors or structures, systems, and components (SSCs) penetrating these containments does not exceed allowable leakage rates specified in the Technical Specifications and that the

integrity of the containment structure is maintained during its service life. Also required by 10 CFR Part 50, Appendix J, Option B, Section III.B, is that "the sum of the leakage rates at accident pressure of Type B tests and pathway leakage rates from Type C tests, must be less than the performance criterion (L_a) with margin, as specified in the Technical Specifications."

By letter dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, (hereinafter, the submittal), the licensee requested an exemption from 10 CFR Part 50, Appendix J, Option B, Section III.B, "Type B and C Tests," to the extent that this regulation imposes Type C leakage rate testing on certain containment isolation valves. The scope of the exemption includes those containment isolation valves categorized as low safety significant (LSS) or non-risk significant (NRS) in accordance with the licensee's categorization process and satisfying one or more of the following criteria:

- a. The valve is required to operate (i.e.) open under accident conditions to prevent or mitigate core damage events
- b. The valve is normally closed and in a physically closed, water filled system.
- c. The valve is in a physically closed system whose piping pressure rating exceeds the containment design pressure rating and that is not connected to the reactor coolant pressure boundary.
- d. The valve is in a closed system whose piping pressure rating exceeds the containment design pressure rating, and is connected to the reactor coolant pressure boundary. The process line between the containment isolation valve and the reactor coolant pressure boundary is non-nuclear safety (i.e., the valve itself would have been classified as nonnuclear safety were it not for that fact that it penetrates the containment building).

e. The valve size is 1-inch nominal pipe size or less (i.e., by definition the valve failure does not contribute to large early release).

3.0 <u>DISCUSSION</u>

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. Under 10 CFR 50.12(a)(2)(vi), special circumstances are present whenever there is any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If the special circumstance of 10 CFR 50.12(a)(2)(vi) is relied on exclusively, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The NRC has completed its evaluation of STPNOC's request for an exemption from the Type C leakage rate testing requirements of 10 CFR Part 50, Appendix J, Option B, Section III.B. The NRC's evaluation is provided in a safety evaluation (SE), dated [to be determined], prepared in support of this exemption.

The staff has reviewed STPNOC's integrated SSC categorization process. The categorization process was found to use both a probabilistic and a deterministic based methodology that appropriately addressed the issues of defense-in-depth, safety margins, and aggregate risk impacts. The staff finds the proposed categorization process to be acceptable to categorize the risk significance of both functions and SSCs for use in reducing the scope of SSCs subject to special treatment. The categorization process provides an acceptable method for defining those SSCs for which exemptions from the special treatment requirements can be

granted. In support of its finding on the licensee's categorization process, the staff also found that the alternative treatment practices provide the licensee with a framework that, if effectively implemented, can result in safety-related LSS and NRS SSCs remaining capable of performing their safety functions under design-basis conditions.

In addition, in determining whether to grant this exemption, the NRC reviewed the licensee's submittal and specifically reviewed the criteria for excluding containment isolation valves from Type C testing. The NRC found that these criteria are reasonable in that even without Type C testing the probability of significant leakage during an accident (that is, leakage to the extent that public health and safety is affected) is small. Based on its review of these criteria, the NRC found that the licensee's assumption that these valves contribute zero leakage is acceptable. In addition, the NRC reviewed the licensee's application of the proposed criteria to the various containment isolation valves and found that the licensee was appropriately applying the criteria.

Based on these findings, the staff determined that LSS and NRS SSCs, meeting the additional criteria proposed by the licensee for containment isolation valves, could be excluded from the scope of Type C leakage rate testing required by 10 CFR Part 50, Appendix J, Option B, Section III.B, without undue risk to public health and safety.

The staff also found that granting of this exemption is in the public interest in that it enhances the effectiveness and efficiency of the NRC's oversight of the licensee's activities at STP by focusing its resources on those SSCs that are most significant to maintaining public health and safety. Likewise, the licensee's resources and attention can be focused on those SSCs that have the highest contribution to plant risk. Further, the licensee's categorization process provides a method for establishing a licensing basis for STP that is consistent with the risk-informed approach in the NRC's reactor oversight process. This enhances the regulatory

framework under which STPNOC operates its facility and by which the NRC oversees the licensee's activities.

As discussed further in the **[to be determined]**, SE prepared in support of this exemption, the NRC has concluded that the special circumstances of 10 CFR 50.12(a)(2)(vi) are satisfied in that the licensee has presented a material circumstance (the categorization process) that was not considered when the regulations were adopted and that provides an acceptable method for refining the scope of SSCs to include under the regulations. Furthermore, it is in the public interest to grant such exemptions. Finally, as required by 10 CFR 50.12(a)(2)(vi), the Executive Director for Operations has consulted with the Commission in the application of this special circumstance during the Commission meeting held on **[to be determined]**.

The licensee has stated that "STP does not plan to revise the allowable leakage values contained in the Technical Specifications...Those penetrations which have been removed from Appendix J scope by this exemption request will be assumed to contribute zero leakage..." Since the cumulative total applies only to leakage from those leak tests that are performed and not the leakage from each penetration, the NRC concluded there is no need for an exemption from the requirement that "the sum of the leakage rates at accident pressure of Type B tests and pathway leakage rates from Type C tests, must be less than the performance criterion (L_a) with margin, as specified in the Technical Specifications."

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not endanger life or property or common defense and security, and is, otherwise, in the public interest. Also, special circumstances are present.

Therefore, the Commission hereby grants, subject to the conditions described below, STPNOC

the exemption from 10 CFR Part 50, Appendix J, Option B, Section III.B, to the extent that it imposes Type C testing requirements on safety-related containment isolation valves satisfying one or more of the criteria specified above, and categorized as LSS or NRS at STP. Based on the staff's determination that there is no need for an exemption from the requirement that "the sum of the leakage rates at accident pressure of Type B tests and pathway leakage rates from Type C tests, must be less than the performance criterion (L_a) with margin, as specified in the Technical Specifications," the exemption granted does not extent to this provision of the regulation. As conditions of this exemption:

- 1. The licensee shall follow the categorization, treatment, and oversight (evaluation and assessment) processes described in its submittal dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, and relied upon by the staff in approving this exemption as discussed in the NRC's SE dated [to be determined]. The licensee has documented these processes in a proposed Final Safety Analysis Report (FSAR) submittal dated May 21, 2001, found acceptable by the staff as the regulatory basis for granting this exemption. The licensee shall incorporate this proposed FSAR submittal into the STP FSAR.
- 2. The licensee shall implement a change control process that incorporates the following requirements:
 - a. Changes to FSAR Section 13.7.2, "Component Categorization Process," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would decrease the effectiveness of the process in identifying high safety significant and medium safety significant components.
 - b. Changes to FSAR Section 13.7.3, "Treatment of Component Categories," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a reduction in the assurance of component functionality.
 - c. Changes to FSAR Section 13.7.4, "Continuing Evaluations and Assessments," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a decrease in effectiveness of the evaluations and assessments.

- d. The licensee shall submit a report, as specified in 10 CFR 50.4, of changes made without prior NRC approval pursuant to these provisions. The report shall identify each change and describe the basis for the conclusion that the change does not involve a decrease in effectiveness or assurance as described above. The report shall be submitted within 60 days of the date of the change.
- e. Changes to FSAR Sections 13.7.2, 13.7.3, and 13.7.4 that do not meet the criteria of a through c above shall be submitted to the NRC for prior review and approval.

Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (FR). Accordingly, based upon the environmental assessment, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment.

This exemption is effective upon submittal of an FSAR update pursuant to 10 CFR 50.71(e) incorporating the FSAR Sections described in the conditions above.

Dated at Rockville, Maryland, this day of 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation

DRAFT

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION STP NUCLEAR OPERATING COMPANY, et. al. SOUTH TEXAS PROJECT, UNITS 1 AND 2 DOCKET NO(S). 50-498 AND 50-499 EXEMPTION

1.0 BACKGROUND

STP Nuclear Operating Company, et al. (STPNOC or the licensee) is the holder of Facility Operating License Nos. NPF-76 and NPF-80, which authorize operation of the South Texas Project, Units 1 and 2 (STP or the facilities). The licenses provide, among other things, that the licensee is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC or the Commission) now or hereafter in effect.

The facilities consist of two pressurized-water reactors located at the licensee's site in Matagorda County, Texas.

2.0 REQUEST/ACTION

Section 50.34(b)(10) of Title 10 of the *Code of Federal Regulations* Part 50 [10 CFR 50.34(b)(10)], states for operating license holders whose construction permit was issued prior to January 10, 1997, that the earthquake engineering criteria in Section VI of Appendix A to 10 CFR Part 100 continues to apply. For operating license holders whose construction permit was issued prior to January 10, 1997, 10 CFR 50.34(b)(11) states that the

reactor site criteria in 10 CFR Part 100, and seismic and geological siting criteria in Appendix A to 10 CFR Part 100 continues to apply. Section VI.(a)(1) of Appendix A to 10 CFR Part 100, requires that those structures, systems, and components (SSCs) that are necessary to assure (1) the integrity of the reactor coolant pressure boundary, (2) the capability to shut down the reactor and maintain it in a safe condition, or (3) the capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures shall remain functional during a safe shutdown earthquake (SSE). Further, in addition to seismic loads, including aftershocks, these SSCs shall be designed to take into account applicable concurrent functional and accident-induced loads. Section VI.(a)(2) of Appendix A to 10 CFR Part 100, requires that all SSCs of the nuclear power plant necessary for continued operation without undue risk to the health and safety of the public shall be designed to remain functional and within applicable stress and deformation limits when subject to the effects of the vibratory motion of the operating basis earthquake (OBE) in combination with normal operating loads. Both Sections VI.(a)(1) and (2) provide a description of the methods for seismically qualifying these SSCs. These methods involve either a suitable dynamic analysis or a suitable qualification test to demonstrate that the SSCs can withstand the seismic and other concurrent loads, except where it can be demonstrated that the use of an equivalent static load method provides adequate conservatism.

By letter dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8 and 21, 2001, (hereinafter, the submittal), the licensee requested an exemption from the testing and specific types of analyses required to demonstrate that SSCs are designed to withstand the SSE and OBE for those safety-related SSCs that are categorized in accordance with its risk-informed categorization

process as low safety significant (LSS) or non-risk significant (NRS). The licensee would not maintain safety-related LSS and NRS components in a seismically qualified condition in accordance with the requirements specified in 10 CFR Part 100. Further, the licensee could replace a safety-related LSS or NRS SSC with an SSC that is not seismically qualified in accordance with the requirements specified in 10 CFR Part 100.

3.0 DISCUSSION

There are no specific provisions in 10 CFR Part 100 for granting exemptions. However, the licensee has also requested an exemption from 10 CFR 50.34(b)(10) and 10 CFR 50.34(b)(11), which can be granted provided the provisions of 10 CFR 50.12 are met. As discussed in the **[to be determined]**, safety evaluation (SE) prepared in support of this exemption, the staff determined it is consistent with Commission policy to apply the exemption provisions of 10 CFR 50.12 to exemptions from the requirements of 10 CFR Part 100, Appendix A, Sections VI.(a)(1) and (2) to the extent requested by the licensee. The staff informed the Commission of the decision to apply the requirements of 10 CFR 50.12 to the exemptions requested from Appendix A to 10 CFR Part 100, Sections VI.(a)(1) and VI.(a)(2), during the Commission meeting on **[to be determined]**.

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50, when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. Under 10 CFR 50.12(a)(2)(vi), special circumstances are present whenever there is any other material circumstances not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If 10 CFR

50.12(a)(2)(vi) is relied on exclusively for satisfying the special circumstances provision of 10 CFR 50.12(a)(2), the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The NRC has completed its evaluation of STPNOC's request for an exemption from the requirements of 10 CFR 50.34(b)(10), 10 CFR 50.34(b)(11), Section VI.(a)(1) of Appendix A to 10 CFR Part 100, and Section VI.(a)(2) of Appendix A to 10 CFR Part 100. The design aspects of these regulations would continue to apply, that is, the design requirements related to the capability of the SSCs to remain functional considering SSE and OBE seismic loads shall be maintained and must be included as a design requirement or procurement requirement of replacement SSCs. The NRC's findings are documented in a SE dated [to be determined], prepared in support of the requested exemption.

The staff has reviewed STPNOC's integrated SSC categorization process. The categorization process was found to use both a probabilistic and a deterministic based methodology that appropriately addressed the issues of defense-in-depth, safety margins, and aggregate risk impacts. The staff finds the proposed categorization process to be acceptable to categorize the risk significance of both functions and SSCs for use in reducing the scope of SSCs subject to special treatment. The categorization process provides an acceptable method for defining those SSCs for which exemptions from the special treatment requirements can be granted. In support of its finding on the licensee's categorization process, the staff also found that the alternative treatment practices provide the licensee with a framework that, if effectively implemented, can result in safety-related LSS and NRS SSCs remaining capable of performing their safety functions under design-basis conditions. Based on these findings, the staff determined that LSS and NRS SSCs could be excluded from the scope of

10 CFR 50.34(b)(10), 10 CFR 50.34(b)(11), Section VI.(a)(1) of Appendix A to 10 CFR Part 100, and Section VI.(a)(2) of Appendix A to 10 CFR Part 100, without undue risk to public health and safety.

The staff also found that granting of this exemption is in the public interest in that it enhances the effectiveness and efficiency of the NRC's oversight of the licensee's activities at STP by focusing its resources on those SSCs that are most significant to maintaining public health and safety. Likewise, the licensee's resources and attention can be focused on those SSCs that have the highest contribution to plant risk. Further, the licensee's categorization process provides a method for establishing a licensing basis for STP that is consistent with the risk-informed approach in the NRC's reactor oversight process. This enhances the regulatory framework under which STPNOC operates its facility and by which the NRC oversees the licensee's activities.

As discussed further in the **[to be determined]**, SE prepared in support of this exemption, the NRC has concluded that the special circumstances of 10 CFR 50.12(a)(2)(vi) are satisfied in that the licensee has presented a material circumstance (the categorization process) that was not considered when the regulations were adopted and that provides an acceptable method for refining the scope of SSCs to include under the regulations. Furthermore, it is in the public interest to grant such exemptions. Finally, as required by 10 CFR 50.12(a)(2)(vi), the Executive Director for Operations has consulted with the Commission in the application of this special circumstance during the Commission meeting held on **[to be determined]**.

4.0 CONCLUSION

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not endanger life or property or common defense and

security, and is, otherwise, in the public interest. Also, special circumstances are present. Therefore, the Commission hereby grants, subject to the conditions described below, STPNOC the exemption from 10 CFR 50.34(b)(10), 10 CFR 50.34(b)(11), and Sections VI.(a)(1) and VI.(a)(2) of Appendix A to 10 CFR Part 100, to the extent that these regulations require testing and specific types of analyses to demonstrate that SSCs are designed to withstand the SSE and OBE for those safety-related SSCs categorized as LSS or NRS at STP. As conditions of this exemption:

- 1. The licensee shall follow the categorization, treatment, and oversight (evaluation and assessment) processes described in its submittal dated July 13, 1999, as supplemented October 14 and 22, 1999, January 26 and August 31, 2000, and January 15, 18, 23, March 19, May 8, and May 21, 2001, and relied upon by the staff in approving this exemption as discussed in the NRC's SE dated [to be determined]. The licensee has documented these processes in a proposed Final Safety Analysis Report (FSAR) submittal dated May 21, 2001, found acceptable by the staff as the regulatory basis for granting this exemption. The licensee shall incorporate this proposed FSAR submittal into the STP FSAR.
- 2. The licensee shall implement a change control process that incorporates the following requirements:
 - a. Changes to FSAR Section 13.7.2, "Component Categorization Process," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would decrease the effectiveness of the process in identifying high safety significant and medium safety significant components.
 - b. Changes to FSAR Section 13.7.3, "Treatment of Component Categories," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a reduction in the assurance of component functionality.
 - c. Changes to FSAR Section 13.7.4, "Continuing Evaluations and Assessments," dated May 21, 2001, and found acceptable by the NRC as described in the NRC's SE dated [to be determined], may be made without prior NRC approval, unless the change would result in a decrease in effectiveness of the evaluations and assessments.

- d. The licensee shall submit a report, as specified in 10 CFR 50.4, of changes made without prior NRC approval pursuant to these provisions. The report shall identify each change and describe the basis for the conclusion that the change does not involve a decrease in effectiveness or assurance as described above. The report shall be submitted within 60 days of the date of the change.
- e. Changes to FSAR Sections 13.7.2, 13.7.3, and 13.7.4 that do not meet the criteria of a through c above shall be submitted to the NRC for prior review and approval.

Pursuant to 10 CFR 51.32, an environmental assessment and finding of no significant impact has been prepared and published in the Federal Register (FR). Accordingly, based upon the environmental assessment, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment.

This exemption is effective upon submittal of a FSAR update pursuant to 10 CFR 50.71(e) incorporating the FSAR Sections described in the conditions above.

Dated at Rockville, Maryland, this

day of

2001.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Director Division of Licensing Project Management Office of Nuclear Reactor Regulation